


# Stream Classification Report

## HUTTON CREEK

WBIC: 2610900
St. Croix County
Cylon and Emerald Twp.
Category 4 Trout Fishing Regulation
Class II Trout Stream

**STREAM DESCRIPTION:**
Length: 7.6 miles, mostly intermittent with approximately 1 mile of Class II trout water.
Mean Stream Width: 5.7 m
Gradient: 1.5 m/ km
Base Flow Stream Discharge: 0.064 cms
Stream Character: Cold water
Stream Order: 3
Habitat Rating: Fair to Good
Coldwater IBI Rating: Good to Poor
Ecoregion: North Central Hardwood Forests

**STOCKING RECORDS:** Hutton Creek is not stocked.

**HUTTON CREEK** is a small spring-fed tributary to the South Fork of the Willow River. Its headwaters begin in eastern St. Croix County and it flows northwest into the South Fork of the Willow River east of New Richmond. The majority of the watershed consists of agricultural lands. There is little flow upstream of CTH O but there are pools that hold water and contain forage minnow species. Water temperatures at Station 2 were warm and filamentous algae was a limiting factor in the survey. Fish habitat was ranked as Fair at Station 1 and Good at Station 2. Riffle/ pool structure is well developed at both sites but bank erosion is moderate to high and there is little fish cover. Fines in the substrate are common. Station 2 ranked higher due to having better riparian buffer width and a slightly better developed riffle/ pool structure.

**FISHERY:**

Hutton Creek has a naturally reproducing brook trout population. Catch per Unit Effort (CPE) was 1176 per mile at Station 1 in the 2015 survey (Table 1). Hutton Creek is in the 90th percentile of small streams (< 3 meters) in this ecoregion. No trout were found at Station 2. Brook trout lengths ranged from 2.1 to 11.7 inches with an average adult length of 8.0 inches (Fig. 1). Reproduction in 2015 was very high ( 855 per mile), placing Hutton Creek in the 93rd percentile. Adult trout abundance (321 per mile) was moderate to high for streams of this size. Hutton Creek is in the 80th percentile for adult density.

The Coldwater Index of Biotic Integrity (IBI) at Station 1 was Good. There were good numbers of intolerant, coldwater species (Table 2). The relatively high number of different species indicates some environmental degradation has occurred. Typical high quality coldwater streams will have few different species present. Spring

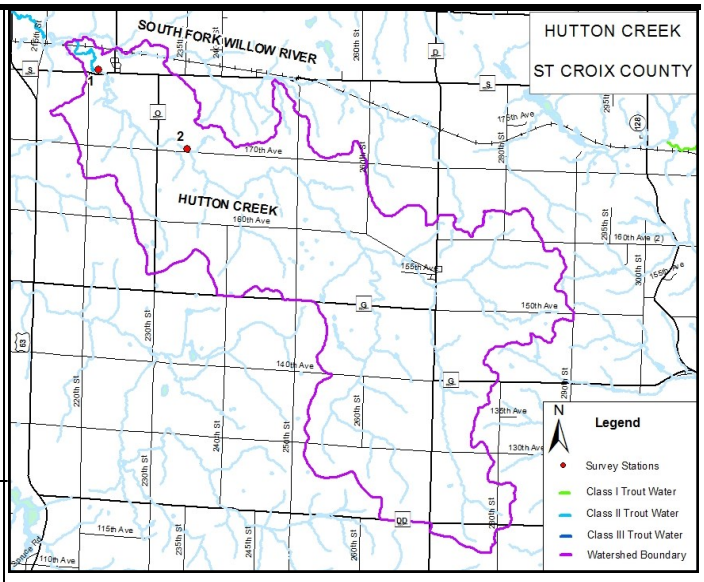
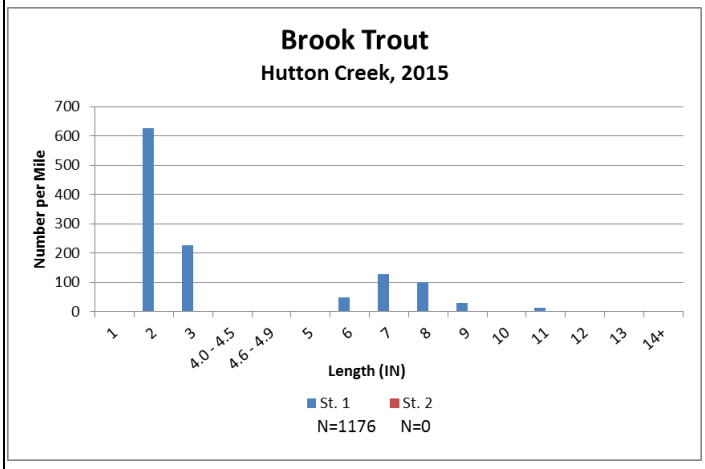



Figure 1 Length distribution




input into Hutton Creek diminishes upstream of CTH S and there is a corresponding increase in water temperature and decrease in flow. No trout were found at Station 2 in this survey or in past surveys.

**FUTURE MANAGEMENT**:

Hutton Creek is currently classified as a Class II trout stream from its mouth upstream approximately one mile. The stream becomes intermittent upstream from CTH O. Based on this survey Hutton Creek should be reclassified as a Class I brook trout stream. There is strong natural reproduction and several

**Table 1** Abundance of brook trout (number per mile) at two stations on Hutton Creek. (-) indicates stations that were not surveyed.

| Year | St. 1 | | St. 2 | |
|---|---|---|---|---|
| | Juv. | Adult | Juv. | Adult |
| 1985 | 9 | 97 | - | - |
| 1997 | 6 | 29 | 0 | 0 |
| 2001 | 48 | 172 | - | - |
| 2015 | 855 | 321 | 0 | 0 |

**Table 2** Relative abundance of fish species found in Hutton Creek in 2015. (-) indicates species that were not targeted.

| Species | St. 1 | St. 2 |
|---|---|---|
| Brook Trout | 165 | 0 |
| Blacknose Dace | 2 | - |
| Brook Stickleback | 26 | - |
| Central Mudminnow | 21 | - |
| Creek Chub | 14 | - |
| Fathead Minnow | 6 | - |
| Johnny Darter | 1 | - |
| Mottled Sculpin | 14 | - |
| Pearl Dace | 34 | - |
| White Sucker | 12 | - |

year classes are present with good survival of adult trout. Hutton Creek is typical of small headwater streams in that the adult trout habitat is limited and the overall stream length is short. Further investigation is needed to document the end of trout water. A springhead may be present upstream of CTH S and downstream from CTH O that may prove to be the true origin of the coldwater portion of the stream. Hutton Creek is an important spawning site for brook trout in this system. In addition, it is the primary coldwater stream in the headwaters of the South Fork of the Willow River. The headwaters of Hutton Creek drains an intense agricultural area. Best Management Practices are a necessity in the watershed to protect Hutton Creek from flooding and water pollution. Control of bank erosion along the stream and the subsequent reduction of fine sediments and nutrients would benefit Hutton Creek and the brook trout fishery. Rotational monitoring should continue using the cold water stream protocol to assess trout populations and species composition.

**For more information on Hutton Creek, you can contact the following persons:**

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